AMENDMENTS TO THE CLAIMS

1. (Previously presented) An assay result reading device for reading the result of an assay performed using a test strip, the device comprising:

at least one light source capable of emitting light incident upon at least first, second, and third spatially separated zones of the test strip, the light source comprising three light emitting diodes (LED's), each of which is aligned with and laterally offset from a corresponding test strip zone;

a first baffle so sized and positioned as to prevent light emitted by the first LED from illuminating the third zone;

a second baffle so sized and positioned as to prevent light emitted by the third LED from illuminating the first zone;

a first photodetector so positioned to detect light emanating from the first zone and the second zone; and

a second photodetector so positioned as to receive light emanating from the second zone and the third zone.

2. (Canceled)

3. (Previously presented) A reading device according to claim 1, wherein the first and second photodetectors are positioned on opposite sides of and laterally offset from one of the zones.

Claims 4-5 (Canceled)

6. (Previously presented) A reading device according to claim 1, wherein at least one of the first and second photodetectors comprises a photodiode.

7. (Previously presented) A reading device according to claim 1, wherein at least one of the first and second photodetectors is positioned between and laterally offset from two of the zones.

8. (Canceled)

9. (Previously presented) A reading device according to claim 1, further comprising a housing enclosing the at least one light source and the first and second photodetectors.

10. (Previously presented) A reading device according to claim 9, wherein the housing is about 12 cm long or less, about 2.5 cm wide or less, and about 2.2 cm tall or less.

11. (Previously presented) A reading device according to claim 1, wherein the at least one light source and the first and second photodetectors are disposed within an area about 1 square centimeter or less.

12. (Previously presented) A reading device according to claim 1, wherein the at least one light source and the first and second photodetectors are disposed within an area about 0.7 square centimeter or less.

13. (Previously presented) A reading device according to claim 1, further comprising:
a computation circuit responsive to signals generated by at least one of the first and second photodetectors representing the presence or absence of a fluid sample in at least one of the zones to:

calculate a flow rate for a fluid flowing along the test strip;
compare the calculated flow rate to upper and lower limits; and
reject the assay result if the calculated flow rate is outside the upper and lower limits.

14. (Original) A reading device according to claim 1, further comprising:
a computation circuit, responsive to an input signal representing the amount of an analyte or the rate of accumulation of an analyte in at least one of the zones of the test strip, to:
compare the input signal to a first threshold;
compare the input signal to a second threshold, the second threshold being less than the first threshold;
generate an output signal if the input signal exceeds the first threshold or the input signal is less than the second threshold, the output signal indicative of a first result if the input signal exceeds the first threshold, or, alternatively, the output signal indicative of a second result if the input signal is less than the second threshold; and
terminate the assay if the input signal exceeds the first threshold or the signal is less than the second threshold.

15. (Previously presented) A reading device according to claim 14, further comprising:
a computation circuit responsive to signals generated by at least one of the first and second photodetectors representing the presence or absence of a fluid sample in at least one of the zones to:
calculate a flow rate for a fluid flowing along the test strip;
compare the calculated flow rate to upper and lower limits; and
reject the assay result if the calculated flow rate is outside the upper and lower limits.

16. (Previously presented) An assay result reading device for reading the result of an assay performed using a test strip, the device comprising:
at least one light source capable of emitting light incident upon at least first, second, and third zones of the test strip; and
at least two photodetectors, the first of which detects light emanating from the first zone and second zone of the test strip; and the second of

which detects light emanating from the second zone and the third zone of the test strip.

17. (**Currently amended**) A method of determining a result of an assay performed using a test strip, the method comprising:

positioning a test strip, having first, second, and third spatially separated zones, in relation to an assay result reader, the reader comprising a housing enclosing at least at least three light sources and two photodetectors; and

measuring at least one light level received by at least one photodetector; and

determining, using a processor and based on the at least one light level, the result of the assay performed on the test strip; and

displaying a value indicative of the result of the assay;

wherein:

each light source is aligned with and laterally offset from a corresponding test strip zone;

the first photodetector is so positioned as to receive light emanating from the first zone and the second zone; and

the second photodetector is so positioned as to receive light emanating from the second zone and the third zone.

18. (Previously presented) A method according to claim 17, wherein the test strip is positioned at least partly inside the assay result reader.

Claims 19-20 (canceled)

21. (Previously presented) An assay result reading device for reading the result of an assay performed using a test strip, the device comprising:

at least one light source system configured to illuminate at least two spatially separated zones of the test strip;

a photodetector system configured to detect light emanating from each of the two said zones; and

a computation circuit responsive to signals generated by the photodetector representing the presence or absence of a fluid sample in at least one of the zones to:

calculate a flow rate for a fluid flowing along the test strip;

compare the calculated flow rate to upper and lower limits; and

reject the assay result if the calculated flow rate is outside the upper and lower limits.

22. (Previously presented) An assay result reading device for reading the result of an assay performed using a test strip, the device comprising:

at least one light source system configured to illuminate at least two spatially separated zones of the test strip;

a photodetector system configured to detect light emanating from each of the two said zones; and

a computation circuit, responsive to an input signal representing the amount of an analyte or the rate of accumulation of an analyte in at least one of the zones of the test strip, to:

compare the input signal to a first threshold;

compare the input signal to a second threshold, the second threshold being less than the first threshold;

generate a first output signal if the input signal exceeds the first threshold or a second output signal if the input signal is less than the second threshold.

23. (Previously presented) A device, comprising:

a housing configured to retain a test strip in a test position;

a light source system configured to illuminate selectively first, second, and third different zones of a test strip retained in the test position;

a first light detector configured to (a) detect light from the first zone of a test strip retained in the test position when the light source illuminates the first zone, and (b) detect light from the second zone of a test strip retained in the test position when the light source illuminates the second zone;

a second light detector configured to (a) detect light from the third zone of a test strip retained in the test position when the light source illuminates the third zone, and (b) detect light from the second zone of a test strip retained in the test position when the light source illuminates the second zone; and

a processor configured to receive respective signals indicative of light detected by the first and second light detectors.

24. (Previously presented) The device of claim 23, wherein the housing is configured so that a liquid sample can be applied to a test strip retained in the test position.

25. (Previously presented) The device of claim 24, further comprising a test strip retained in the test position.

26. (Previously presented) The device of claim 25, wherein the housing completely encloses the first, second, and third zones of the test strip.

27. (Previously presented) The device of claim 25, wherein the test strip comprises a lateral flow away test strip.

28. (Previously presented) The device of claim 27, wherein the test strip is configured to allow the liquid sample to flow along the test strip between at least two of the first, second, and third zones, and the processor is configured to determine a flow rate of the liquid based on signals received from at least one of the first and second light detectors.

29. (Previously presented) The device of claim 28, wherein the processor is configured to determine the flow rate of the liquid based on signals received from both the first and second light detectors.

30. (Previously presented) The device of claim 28, wherein the processor is configured to determine the presence of an analyte based on signals received from at least one of the first and second light detectors.

31. (**Currently amended**) A method, comprising:
allowing a liquid to advance along a test strip after having been applied thereto;
illuminating a first zone of the test strip with light from a first light source;
detecting light from the illuminated first zone using a first light detector;
illuminating a second zone of the test strip with light from a second light source;
detecting light from the illuminated second zone using the first light detector;
detecting light from the illuminated second zone using a second light detector;
illuminating a third zone of a test strip with light from a third light source;
detecting light from the illuminated third zone using the second light detector;
receiving, with a processor, respective signals from the first and second light detectors, the signals indicative of the detected light; ~~and~~
determining, with the processor, a value indicative of a rate at which the liquid advances along the test strip based on the received signals; and
performing at least one action based on the determined value.

32. (Previously presented) The method of claim 31, further comprising determining the presence in the liquid of an analyte based at least in part on light detected by the first and second light detectors.

33. (Previously presented) The method of claim 31, wherein illuminating the second zone comprises illuminating the second zone at least twice and detecting light from

the illuminated second zone using the first detector is performed at a different time from detecting light from the illuminated second zone using the second detector.

34. (Previously presented) The device of claim 21, wherein the light source system comprises a light emitting diode configured to illuminate at least two spatially separated zones of the test strip.

35. (Previously presented) The device of claim 21, wherein the photodetector system comprises a photodiode configured to detect light emanating from each of the two zones.

36. (Previously presented) The device of claim 22, wherein the light source system comprises a light emitting diode configured to illuminate at least two spatially separated zones of the test strip.

37. (Previously presented) The device of claim 22, wherein the photodetector system comprises a photodiode configured to detect light emanating from each of the two zones.

38. (Previously presented) The device of claim 22, wherein the computation circuit indicates that an assay is void if the input signal exceeds the first threshold or is less than the second threshold.

39. (Previously presented) A device, comprising:
a housing;
a lateral flow test strip disposed in a test position with respect to the housing, the test strip comprising a sample receiving portion extending from the housing and first, second, and third zones disposed within the housing, the test strip defining a flow path along which liquid received by the sample receiving

portion can sequentially flow to the first, second, and third zones of the test strip;

a light source system configured to illuminate selectively the first, second, and third zones of the test strip;

a first light detector configured to:

detect light from the first zone of the test strip when the light source illuminates the first zone;

output first signals indicative of light detected from the first zone;

detect light from the second zone of the test strip when the light source illuminates the second zone; and

output second signals indicative of light detected from the second zone;

a second light detector configured to:

detect light from the third zone of a test strip when the light source illuminates the third zone;

output third signals indicative of light detected from the third zone;

detect light from the second zone of a test strip when the light source illuminates the second zone; and

output fourth signals indicative of light detected from the second zone, and

a processor configured to receive first and second signals from the first detector and to receive third and fourth signals from the second detector and to determine the presence of an analyte in liquid received by the sample receiving member based at least in part upon the received first, second, third, and fourth signals.

40. (Previously presented) The device of claim 39, wherein the processor is configured to determine a time for liquid to flow along the test strip between the first and second zones based upon first and second signals received from the first detector and third and fourth signals received from the second detector.